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21.6.1904

SNOW AND ICE BULLETIN.

PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE.
Willis L. Moore, Chief U. S. Weather Bureau.



This bulletin is issued weekly on Tuesdays during the winter season, based upon data from regular Bureau stations, supplemented by reports from voluntary observers. Shaded portions represent areas with snow; lines indicate depth, in inches. Due to the limited space, not all reports of snow and ice are shown, but the limited space may not be done.

WASHINGTON, D. C., December 6, 1904.

DEPTH OF SNOW.

On December 5, 1904, the northern portions of the country from the upper Missouri Valley to the New England coast were covered with snow varying in depths from 1 to 3 inches, except over comparatively limited areas in the upper Lake region and portions of New England and the Middle Atlantic States where greater depths were reported. Over the upper Michigan Peninsula snow ranged in depth from 5 to 15 inches; in portions of northern New York from 3 to 8 inches, and in northern New Hampshire from 3 to 15 inches. A considerable portion of the southeastern Rocky Mountain slope was also covered to depths ranging from 1 to 4 inches. Except in this last-mentioned region, where there was no snow at this time last year, the area now covered is much the same as at the corresponding date of 1903, the depths, however, in the upper Lake region and over the eastern portion of New England being materially less, while depths greater than in 1903 are shown over considerable areas in Pennsylvania, New Jersey, and New York.

ICE IN RIVERS, HARBORS, ETC.

Only the more northerly stations report ice at 8 p. m., December 5, 1904. In the rivers of northern New England ice ranges from 2.5 to 6 inches and a thickness of 2 inches in the Hudson is reported from Albany, N. Y. In the upper Mississippi ice is 4.5 inches thick at St. Paul, Minn., and in the upper Missouri ranges from 2.5 inches at Williston, N. Dak., to 4 inches at Bismarck, N. Dak. The greatest thickness reported is 7 inches in the Red River of the North at Moorhead, Minn.

The Weather Bureau official at Albany, N. Y., telegraphs the following:

Albany, N. Y., December 6.—Ice in the Mohawk River is about 4 inches thick, with 1 inch of snow on the ground. In the upper Hudson ice is from 1 to 2 inches thick, with floating ice at Stuyvesant and Athens. Snow in Hudson Valley ranges from 2 inches at Glens Falls to trace at Athens.

At the corresponding date of 1903 there was much more ice in the northern districts than at this date. In 1903 the Missouri was frozen as far south as Sioux City, Iowa, and the Mississippi to La Crosse, Wis.; there was considerable ice in the upper Ohio, and in the rivers of New England from 2 to 3 inches more than at this date.

JAMES BERRY, Chief of Climate and Crop Division.

DEPTH OF SNOW AND THICKNESS OF ICE AT 8 P. M., DECEMBER 5, 1904.

Stations.		Snow.		Stations.		Snow.		Stations.		Snow.	
		Inches	Feet in rivers, harbors, etc.			Inches	Feet in rivers, harbors, etc.			Inches	Feet in rivers, harbors, etc.
Arizona.				Michigan.—Cont'd.				Pennsylvania.			
Flagstaff		1		Sault Ste. Marie		10	0.0	Clarion		T.	
Colorado.				St. Ignace		6		Confluence		2	
Denver		1		South Haven		3		Erie		1	0.0
Connecticut.				Minnesota.				Freeport		1	
Hartford		2		Duluth		1	5.0	Greensboro		2	
New Haven		3		Moorhead		1	7.0	Harrisburg		4	0.0
Dist. of Columbia.				St. Paul			4.5	Johnstown		2	
Washington		1		Missouri.				Lock No. 4		2	
Illinois.				Sedalia		T.		Marion		4	
Chicago		1	0.0	Montana.				Oil City		T.	
St. John		T.		Havre		1		Philadelphia		4	0.0
Indiana.				Nebraska.				Pittsburg		2	0.0
La Porte		1		Valentine		T.		Rowlesburg		1	
Iowa.				New Hampshire.				Salisbury		2	
Charles City		1		Bethlehem		15		Scranton		3	
De Moines		1.0		Chatham		T.		State College		T.	
Estherville		T.		Concord		1	2.5	Warren		3	
Forest City		1		Keene		3		West Newton		4	
Kansas.				New Mexico.				Rhode Island.			
Concordia		T.		Santa Fe		2		Block Island		1	0.0
Dodge		4		New York.				Narragansett		2	0.0
Ellinwood		4		Albany		1	2.0	Providence		2	0.0
Toronto		2		Beaver		8		South Dakota.			
Winifred		T.	0.0	Binghamton		2		Huron		1	3.0
Maine.				Buffalo		2	0.0	Piorre		1	0.0
Bangor		4.0		Cooperstown		1		Rapid City		1	
Buckfield		T.		De Ruyter		6		Texas.			
Eastport		T.	4.0	Franklinville		5		Ablene		T.	
Gardiner		T.	4.0	Geneva		T.		Amarillo		3	
Lewiston		2	6.0	Ithaca		1		Utah.			
Orono		3		Jamestown		1		Modena		T.	
Portland		1		Lake Placid		4		Vermont.			
Maryland.				Malone		2		Brattleboro		1	6.0
Baltimore		2	0.0	New York		4		Burlington		T.	
Fallston		2		Ogdensburg		1		Northfield		2	
Frederick		2		Oswegatchie		4		St. Johnsbury		4	
Massachusetts.				Oswego		3	1.0	Virginia.			
Adams		T.		Port Jervis		T.		Stephens		T.	
Boston		1	0.0	Rochester		T.	0.0	West Virginia.			
Fitchburg		1		Saratoga		2		Elkins		T.	
Nantucket		1	0.0	Syracuse		2		Fairmont		2	
Michigan.				Watertown		4		Parkersburg		2	0.0
Alpena		2	1.5	Wedgwood		T.		Weston		1	
Detroit		T.	0.0	North Dakota.				Wheeling		2	
Escanaba		2	0.0	Bismarck		1	4.0	Wisconsin.			
Grand Rapids		2		Williston		2	2.5	Green Bay			4.0
Hillsdale		T.		Ohio.				La Crosse		T.	0.0
Houghton		15	1.5	Cleveland		T.	0.0	Madison		T.	
Humboldt		8		Garrettsville		T.		Milwaukee		1	0.0
Lansing		5		Philo		T.		Portage		T.	
Mackinaw		5		Portsmouth		1		Prentice		T.	
Marquette		8	0.0	Toledo		1	1.0	Sheboygan		T.	
Port Huron		T.	0.5	Wauseon		T.		Wyo.			
Saginaw		T.		Oklahoma.				Yellow		T.	
				Oklahoma		1					

T. indicates trace.

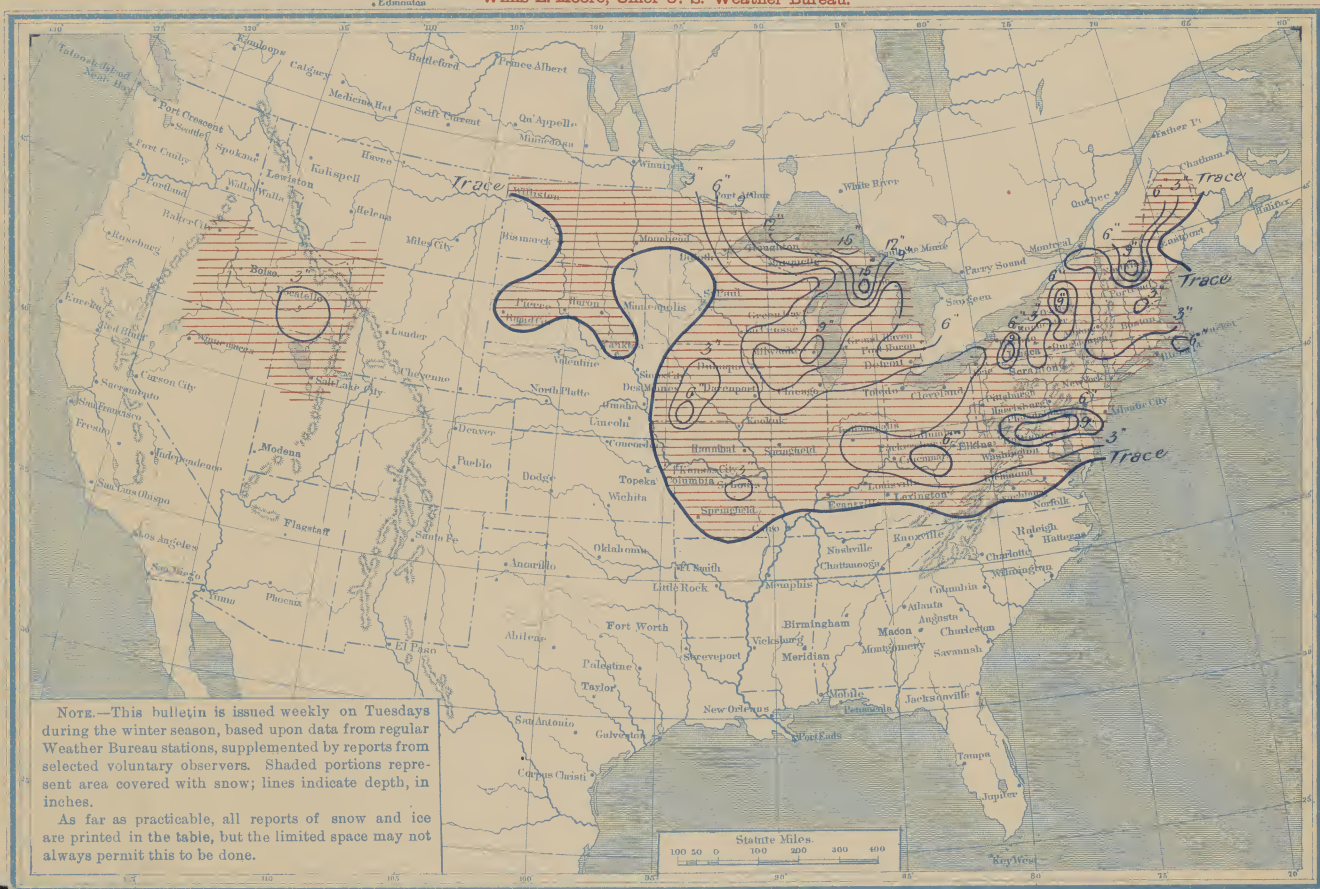
Dec. 13, 1904

U. S. DEPARTMENT OF AGRICULTURE,
WEATHER BUREAU.

SNOW AND ICE BULLETIN.

PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE.

Willis L. Moore, Chief U. S. Weather Bureau.



WASHINGTON, D. C., December 13, 1904.

DEPTH OF SNOW.

The area covered at 8 p. m., December 12, was much greater than at the same hour on the 5th instant, when the greater part of the central valleys, now very generally covered to depths ranging from traces to 3 inches or more, was entirely bare. Over the central valleys the southern limit now extends to the southern portions of Missouri and Illinois, and thence eastward through central Kentucky and southern Virginia, touching the coast line in the vicinity of the Virginia capes, somewhat more than 100 miles farther south than the southern limit on the 5th. Within the area covered on the last-mentioned date increased depths are reported from nearly all stations, the most decided increase being shown along the western shore of Lake Michigan, where it ranges from 5 to 10 inches.

The area embracing portions of New Mexico, Texas, Oklahoma, and Kansas, which the bulletin of last week showed to be covered to depths ranging from 1 to 4 inches, is now entirely free from snow.

In the Ohio Valley, lower Lake region, Middle Atlantic States, and southern New England there is more snow than there was at the corresponding date of 1903, but in northern New England and from the upper Mississippi Valley and upper Lake region westward to the Rocky Mountains there is less.

ICE IN RIVERS, HARBORS, ETC.

Since the issue of the preceding bulletin there has been material increase in ice formation in the northern districts eastward of the upper Mississippi Valley, especially in New England. A slight increase is also reported from stations on the upper Missouri River, but in the Red River of the North there has been practically no change.

In the rivers of New England ice now generally ranges from 8 to 11 inches; at stations along the lower Lakes from 1 to 5 inches; and on the upper Lakes from 2 to 9 inches.

The following special reports have been received by telegraph:

Albany, N. Y., December 13, 1904.—Ice in Hudson ranges from 2 inches at Glens Falls to 5 inches at Coeymans and 3 inches at Athens; snow in Hudson Valley from 3 inches at Glens Falls to trace at Athens. Ice in Mohawk ranges from 3 inches at Little Falls to 6 inches at Schenectady; snow in Mohawk Valley from 3 inches at Little Falls to 1 inch at Schenectady. The snow above reported was increased by 4 inches or more during night of 12th.

Harrisburg, Pa., December 12.—Snow 2 to 4 inches deep over the greater part of the Susquehanna Valley; river frozen over in many places, but channel one-third of width still open at Harrisburg.

Duluth, Minn., December 12.—Harbor almost covered with 4 to 10 inches of ice.

La Crosse, Wis., December 13.—River frozen at Prairie du Chien.

Omaha, Nebr., December 13.—River closed during night.

In New England there is now considerably more ice than there was at the corresponding date of 1903, but in the Lake region and in the western rivers there is decidedly less.

JAMES BERRY, Chief of Climate and Crop Division.

DEPTH OF SNOW AND THICKNESS OF ICE AT 8 P. M., DECEMBER 12, 1904.

Stations.		Stations.		Stations.	
Snow.	Ice in rivers, harbors, etc.	Snow.	Ice in rivers, harbors, etc.	Snow.	Ice in rivers, harbors, etc.
Connecticut.					
Harford	3 3.0	Michigan.—Cont'd.		New York.—Cont'd.	
New Haven	2	Escanaba	2 0.0	Saratoga	2
Storrs	2	Grand Rapids	5	Syracuse	5
West Simsbury	2	Hillsdale	5	Watertown	5
Delaware.		Houghton	14 4.5	Wedgwood	4
Millsboro	12	Humboldt	9	North Dakota.	
Dist. of Columbia.		Lansing	6	Bismarck	T. 4.0
Washington	4	Mancelona	15	Williston	T. 7.0
Idaho.		Manistee	8	Ohio.	
Boise	1	Marquette	12 0.0	Bangorville	1
Focatello	4	Port Huron	6 2.0	Canal Dover	2
Illinois.		Saginaw	2	Cincinnati	3 0.0
Ashton	6	Sault Ste. Marie	12 0.0	Cleveland	1 0.0
Bloomington	1	South Haven	4	Coalton	6
Chicago	4	Wetmore	15	Columbus	2 0.0
La Salle	3	Minnesota.		Garrettsville	1
Olney	2	Beaver Bay	10 0.0	Phillo	3
St. John	1	Duluth	4 9.0	Sandusky	1 1.0
Springfield	1	Farmington	T.	Tiffin	T.
Winchester	T.	Minneapolis	T.	Toledo	1 3.0
Winnebago	8	Moorhead	T.	Wauseon	2
Indiana.		St. Paul	5.5	Oregon.	
Evansville	T. 0.0	Shakopee	T.	Baker City	T.
Indianapolis	3	Two Harbors	7 0.0	Pennsylvania.	
Jeffersonville	T.	Missouri.		Aleppo	5
Lafayette	1	Columbia	2	Clarion	2
La Porte	2	Hannibal	T. 0.0	Easton	4
Marion	2	Ironton	2	Erie	2 3.0
Iowa.		Kansas City	2 0.0	Greenville	2 6
Albia	2	Newhaven	3	Harrisburg	4 0.0
Atlantic	1	St. Louis	2 0.0	Philadelphia	3 2.0
Charles City	2	Springfield	T.	Pittsburg	4 0.0
Davenport	1 0.0	Willowsprings	2	Scranton	5
De Moines	5 4.0	Montana.		Rhode Island.	
Dubuque	6 0.0	Havre	T.	Block Island	5 0.0
Estherville	1	Nevada.		Kingston	5
Greene	1	Winnemucca	T.	Narragansett	5
Iowa City	2	New Hampshire.		Providence	4
Keokuk	T. 0.0	Bethlehem	9	South Dakota.	
Oscola	6	Concord	1 9.5	Huron	T. 5.0
Kansas.		Durham	T.	Pierre	T. 0.0
Horton	T.	Keene	4	Rapid City	1
Kentucky.		New Jersey.		Yankton	T. 0.0
Catlettsburg	6	Atlantic City	3	Utah.	
Lexington	T.	Cape May	6 0.0	Salt Lake City	T.
Louisville	1 0.0	New Mexico.		Vermont.	
Mount Sterling	2	Santa Fe	T.	Brattleboro	1 11.0
Maine.		New York.		Burlington	1
Bangor	7.5	Addison	1	Northfield	2
Eastport	9.0	Albany	2 4.0	St. Johnsbury	4
Gardiner	T. 8.0	Auburn	4	Virginia.	
Lewisport	2	Beaver	10	Lynchburg	1 0.0
Millinocket	8	Binghamton	2 0.0	Richmond	2 0.0
Portland	2	Buffalo	4 0.0	Stephens	10
Maryland.		De Ruyter	7	Wytheville	T.
Baltimore	7 0.5	Franklinville	12	West Virginia.	
Easton	5	Herkimer	3	Elkins	5 0.0
Fallston	9	Ithaca	2	Parkersburg	4 4.0
Massachusetts.		Jamestown	3	Wisconsin.	
Adams	T.	Lake Placid	4	Ashland	7
Amherst	1	Lowville	11	Burnett	4
Boston	1	Malone	2	Grand Rapids	3
Concord	T.	New York	5	Green Bay	6 6.5
Fitchburg	2	Ogdensburg	3	La Crosse	3 0.0
Mansfield	2	Oswegatchie	12	Madison	6
Nantucket	8 0.0	Oswego	5 5.5	Milwaukee	11 0.0
Michigan.		Plattsburg	T.	Mount Horeb	5
Alpena	3 2.0	Port Jervis	3	Portage	5
Big Rapids	3	Poughkeepsie	1	Prentice	4
Carsonville	6	Rochester	5 3.0	Sheboygan	6
Detroit	5 5.0	Rome	2	Wyoming.	
		Saranac Lake	3	Yellowstone Park	1

T. indicates trace.

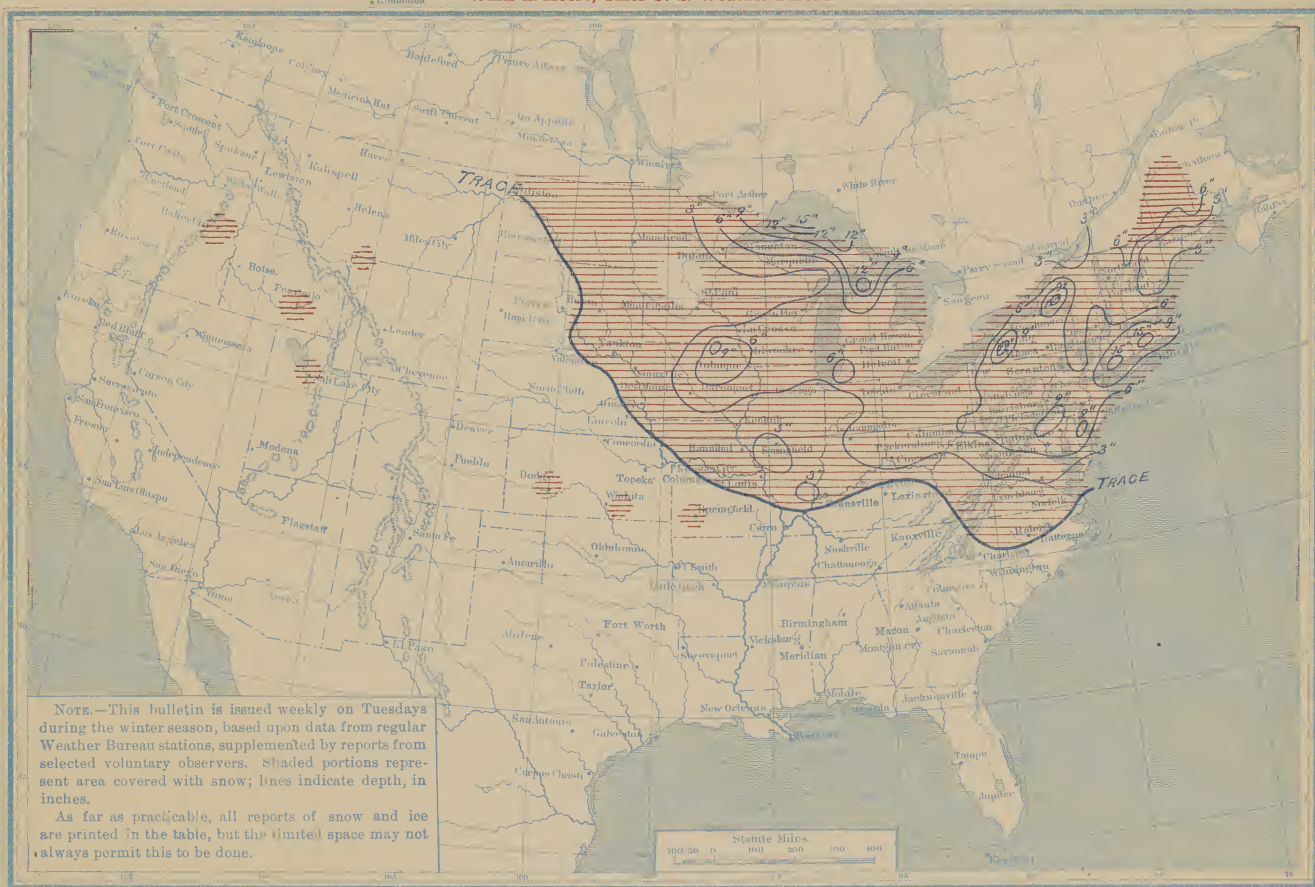
Dec. 20, 1904

U. S. DEPARTMENT OF AGRICULTURE,
WEATHER BUREAU.

SNOW AND ICE BULLETIN.

PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE.

Willis L. Moore, Chief U. S. Weather Bureau.



DEPTH OF SNOW AND THICKNESS OF ICE AT 8 P. M., DECEMBER 19, 1904.

WASHINGTON, D. C., December 20, 1904.

DEPTH OF SNOW.

The area covered with snow at 8 p. m., December 19, reached from the Missouri Valley to the Atlantic coast, the southern limit extending into Kentucky and North Carolina. The greater part of the winter-wheat belt is covered to depths ranging from 1 to 5 inches, while the Atlantic coast districts from central Virginia to southern New England are covered to depths ranging from 3 to 20 inches, the greatest depths being reported from stations along Long Island Sound.

The present snow area is much larger than that of the corresponding date of 1903, and over the central valleys, Middle Atlantic States, and New England the depths are materially greater, but over the northern portions of the upper Lake region and thence westward to the northern Rocky Mountain region there is now less snow than at this date last year.

ICE IN RIVERS, HARBORS, ETC.

There has been a general increase in the thickness of ice in all northern districts as compared with the reports of the 12th instant. In the rivers of northern New England ice now ranges from 10 to 13 inches, an increase of from 1 to 5 inches over the previous week, and a corresponding increase is reported from stations on the Great Lakes and on the upper Mississippi and upper Missouri rivers, the two rivers last mentioned being closed considerably farther south than on the 12th.

The following special reports have been received by telegraph:

Gardiner, Me., December 19.—Labor of cultivating ice fields commenced this morning on Kennebec; surface fine and prospects of excellent crop good.

Albany, N. Y., December 20.—Ice in Mohawk River ranges from 4 inches at Little Falls to 7 inches at Schoenectady and in Hudson from 5 inches at Glens Falls to 9 inches at Coeymans. Snow in Hudson Valley is from 6 to 9 inches deep, and in Mohawk Valley ranges from 6 to 10 inches.

Harrisburg, Pa., December 19.—Snow over Susquehanna and Juniata valleys averages about 5.5 inches. Susquehanna and tributaries generally ice bound. Thickness of ice at Harrisburg 6 to 8 inches; surface rough in places.

Hannibal, Mo., December 19.—Ice gorged at bridge; river open at city.

Duluth, Minn., December 19.—Harbor ice ranges from 6 to 14 inches.

Omaha, Neb., December 19.—Channel open.

There is now decidedly less ice than at the corresponding date of last year in the western lakes and rivers, but there is considerably more in the rivers of the Middle Atlantic States and New England.

JAMES BERRY, Chief of Climate and Crop Division.

Stations.		Stations.		Stations.	
Snow.	Ice in rivers, harbors, etc.	Snow.	Ice in rivers, harbors, etc.	Snow.	Ice in rivers, harbors, etc.
Connecticut.					
Hartford	8 5.5	Michigan.			
New Haven	16	Alpena	3 5.0	No. Caro.—Con'd.	
Storrs	11	Big Rapids	2	Charlotte	T.
West Simsbury	13	Detroit	3 6.0	Raleigh	2
Delaware.		Escanaba	1 4.0	North Dakota.	
Millsboro	9	Ewen	4	Bismarck	2 7.5
Seaford	10	Grand Rapids	4	Devils Lake	T.
Dist. of Columbia.		Hillsdale	4	Williston	T. 8.5
Washington	8	Houghton	16 5.0	Ohio.	
Idaho.		Humboldt	10	Bangorville	5
Pocatello	T.	Lansing	4	Cincinnati	4 0.0
Illinois.		Mancelona	14	Cleveland	4 0.0
Ashton	4	Manistee	6	Coalton	5
Chicago	2	Marquette	8 0.0	Columbus	4 6.5
Hillsboro	5	Port Huron	5 5.0	Garrettsville	5
La Salle	1	Saginaw	5	Phillo	5
Monmouth	1	Sault Ste. Marie	11 3.0	Portsmouth	4
Olney	4	South Haven	6	Sandusky	2 7.0
St. John	T.	Westbranch	3	Tiffin	4
Springfield	3	Wetmore	12	Toledo	3 4.5
Winchester	3	Minnesota.		Oregon.	
Winnebago	8	Beaver Bay	10 0.0	Baker City	T.
Indiana.		Duluth	5 10.5	Pennsylvania.	
Evansville	T.	Farmington	1	Alleppo	6
Indianapolis	5	Manneapolis	T.	Easton	6
Jeffersonville	T.	Moorhead	1 12.0	Erie	4 5.0
La Porte	3	St. Paul	T. 9.0	Greenville	7
Marion	2	Shakopee	T.	Harrisburg	6 7.0
Princeton	2	Two Harbors	8 0.0	Philadelphia	6 3.0
Rockville	1	Missouri.		Pittsburg	5 0.0
Iowa.		Columbia	2	Seranton	6
Atlantic	2	Hannibal	2 0.0	St. College	3
Carroll	4	Ironton	T.	Rhode Island.	
Charles City	6	Kansas City	T. 0.0	Kingston	20
Davenport	2 0.0	Newhaven	4	Narragansett	14
Des Moines	5 8.0	St. Louis	T. 0.0	Providence	10
Dubuque	6 3.0	Sedalia	T.	South Dakota.	
Estherville	2	Springfield	T.	Huron	2 7.5
Forest City	4	Willowsprings	T.	Pierre	3.0
Greene	9	Nebraska.		Yankton	1 4.5
Iowa City	4	Lincoln	T.	Utah.	
Keokuk	1 0.0	Omaha	1 2.5	Salt Lake City	T.
Sioux City	1 3.5	Valentine	9	Vermont.	
Kansas.		New Hampshire.		Brattleboro	3 13.0
Dodge	T.	Bethlehem	9	Northfield	3
Winfield	T.	Concord	3 10.0	St. Johnsbury	4
Kentucky.		Durham	1	Virginia.	
Catlettsburg	2	Keene	5	Blacksburg	2
Enbank	T.	New Jersey.		Dale Enterprise	T.
Louisville	T. 0.0	Atlantic City	5	Lynchburg	T. 0.5
St. John	T.	Cape May	5 2.0	Norfolk	3
Williamsburg	T.	New Mexico.		Richmond	2 0.5
Maine.		Santa Fe	T.	Stephens	7
Bangor	1 13.0	New York.		Williamsburg	3
Buckfield	T.	Albany	6 6.0	Woodstock	4
Eastport	2 13.0	Auburn	4	Wytheville	T.
Gardiner	2 10.0	Beaver	13	West Virginia.	
Lewisport	4 11.0	Binghamton	3 0.0	Elkins	4 0.0
Millinocket	4	Buffalo	6 2.0	Fairmont	3
Orono	2	Franklinville	14	Huntington	3
Portland	2	Geneva	3	Parkersburg	2 2.0
Vaneboro	7	Herkimer	4	Wheeling	7
Maryland.		Ithaca	9	Wisconsin.	
Baltimore	6 5.0	Lowville	9	Barron	T.
Easton	6	Malone	2	Burnett	5
Fallston	9	New York	10	Grand Rapids	3
Frederick	9	Ogdensburg	4	Green Bay	5 8.0
Pocomoke	2	Oswegatchie	8	La Crosse	3 4.5
Massachusetts.		Oswego	7 8.0	Madison	4 0.0
Adams	6	Poughkeepsie	8	Midwaukee	4
Amherst	3	Rochester	6 5.0	Mount Horeb	6
Boston	8	Rome	6	Portage	4
Concord	3	Syracuse	4	Prentice	3
Fitchburg	7	Watertown	3	Racine	8
Mansfield	10	Wedgwood	4	Sheboygan	3
North Adams	4	North Carolina.		Washburn	7 5.0
		Asheville	T.	Wyoming.	
				Yellowstone Park	1

T. indicates trace.

SNOW AND ICE BULLETIN.

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Willis L. Moore, Chief U. S. Weather Bureau.



WASHINGTON, D. C., December 27, 1904.

DEPTH OF SNOW.

Since the issue of the preceding bulletin nearly all snow in the central valleys has melted, and a large part of the Middle Atlantic States that was covered to depths ranging from 3 to 9 inches is also free of snow. Diminished depths are reported from all districts east of the upper Missouri Valley with the exception of portions of the upper Lake region and a few stations in northern New England where a slight increase is indicated. Considerable snow has fallen, however, over a large part of the northern Rocky Mountain region, where there was practically no snow on the 19th instant.

At the corresponding date of 1903 there was considerably more snow in the Lake region, and portions of the central valleys now bare, were covered to depths ranging from 1 to 4 inches, but there is now more snow in New England and the northern portion of the Middle Atlantic States, and also over the northern Rocky Mountain region, than there was December 27, 1903.

ICE IN RIVERS, HARBORS, ETC.

Except in portions of the lower Lake region, and Middle Atlantic States and in the Ohio Valley, an increase in the thickness of ice is reported from all northern districts, as compared with the reports of the 19th instant.

In the rivers of northern New England ice now ranges from 12 to 18 inches, and ice harvest in that section has begun earlier than usual. Stations along the Great Lakes and on tributaries thereto report measurements generally ranging from 4 to 10 inches. The Mississippi river is frozen southward to Dubuque and the Missouri to Omaha, ice in the former ranging from 3 to 10 inches, and in the latter from 5 to 11 inches.

The following special reports have been received by telegraph:

Gardiner, Me., December 26.—Ice harvest in the Kennebec commenced to-day, which is among the earliest dates.

Lewiston, Me., December 26.—Harvesting begun; ice of first quality.

Brattleboro, Vt., December 27.—Ice harvest begun.

Albany, N. Y., December 27.—Snow in Mohawk Valley ranges from 1 to 3 inches and in Hudson Valley from 4 to 6 inches. Ice in Mohawk is about 8 inches thick and in Hudson ranges from 6 to 10 inches.

Harrisburg, Pa., December 26.—Snow averages about five inches deep over Susquehanna and Juniata valleys. River and tributaries frozen.

Parkersburg, W. Va., December 27.—Snow all gone. Ice gorges moving in Ohio. River open for navigation. Coal fleet moving.

Duluth, Minn., December 26.—Harbor covered; narrow strip of ice formed in lake against Minnesota Point.

As compared with the corresponding date of 1903 there is decidedly more ice in New England and the northern portion of the Middle Atlantic States, but much less in the Lake region, as a whole, and in western rivers.

JAMES BERRY, Chief of Climate and Crop Division.

DEPTH OF SNOW AND THICKNESS OF ICE AT 8 P. M., DECEMBER 26, 1904.

Stations.	Snow.	Ice in rivers, harbors, etc.	Stations.	Snow.	Ice in rivers, harbors, etc.	Stations.	Snow.	Ice in rivers, harbors, etc.
Arizona.	Inches	Inches	Michigan.—Cont'd.	Inches	Inches	New York—Cont'd.	Inches	Inches
Flagstaff	T.		Hillsdale	T.		Poughkeepsie	8	
Connecticut.			Houghton	17	7.0	Rochester	1	6.0
Hartford	6	8.0	Mackinaw	6		Rome	6	
New Haven	11		Mancelona	12		Syracuse	T.	
West Cornwall	6		Marquette	10	0.0	Watertown	2	
Delaware.			Port Huron	T.		Wedgewood	2	
Millsboro	T.		Saginaw	T.		North Dakota.		
Safoord	T.		Sault Ste. Marie	11	8.0	Bismarck	8	9.5
Dist. of Columbia.			Minnesota.			Devils Lake	2	
Washington	T.		Beaver Bay		15.0	Williston	3	11.0
Idaho.			Bird Island	3		Ohio.		
Boise	2		Duluth	8	11.0	Columbus		1.0
Pocatello	6		Farmington	1		Garrettsville	T.	
Illinois.			Glencoe	2		Sandusky		0.5
Ashton	T.		Maple Plain	1		Tiffin	2	
Monmouth	T.		Minneapolis	1		Toledo	T.	4.0
La Salle	T.		Moorhead	?	15.0	Wauson	2	
Winnebago	T.		St. Paul	1	10.0	Oregon.		
Indiana.			Shakopee	1		Baker City	2	
Auburn	2		Winnebago	1		Pennsylvania.		
Le Porte	T.		Montana.			Erie		6.0
Marion	T.		Haure	4		Gordon	8	
Syracuse	T.		Helena	2		Harrisburg	6	7.0
Iowa.			Kalspell	1		Marion	6	
Carroll	T.		Miles City	1		Philadelphia	4	1.5
Charles City	3		Nebraska.			Scranton	4	
Des Moines	T.	7.5	Omaha	T.	5.0	Selinsgrove	8	7.0
Dubuque	T.	3.0	Nevada.			Towanda	4	12.0
Forest City	T.		Carson City	T.		Rhode Island.		
Greene	2		New Hampshire.			Block Island	3	0.0
Kansas.			Bethlehem	8		Kingston	12	
Concordia	T.		Chatham	3		Narragansett	6	
Dodge	T.		Concord	2	13.0	Providence	7	
Topeka	T.		Keene	5		South Dakota.		
Maine.			New Mexico.			Huron	1	9.0
Bangor	4	13.5	Santa Fe	1		Pierre	1	8.0
Buckfield	2		New York.			Vermont.		
Eastport	3	18.0	Albany	4	10.5	Brattleboro	4	14.0
Gardiner	3	13.0	Beaver	9		Burlington	4	
Lewiston	6	12.0	Binghamton	2	0.0	Northfield	T.	
Portland	3		Buffalo	1	3.0	Virginia.		
Maryland.			Cooperstown	3		Dale Enterprise	T.	
Baltimore	T.	6.0	De Ruyter	6		Stephens	T.	
Massachusetts.			Franklinville	5		Washington.		
Adams	1		Herkimer	2		Walla Walla	1	
Amherst	2		Ithaca	2		Wisconsin.		
Boston	3		Jamestown	1		Burnett	T.	
Fitchburg	4		Le Roy	2		Green Bay	2	8.0
Mansfield	9		Lowville	6		La Crosse	1	4.0
Nantucket	1	0.0	Malone	5		Portage	T.	
North Adams	4		New York	8		Prentice	5	
Michigan.			Ogdensburg	9		Sheboygan	2	
Alpena	4	6.0	Oswego	5	10.0	Wyoming.		
Detroit	5	5.0	Port Jervis	3		Yellowstone Park	6	
Escanaba	4	7.5						

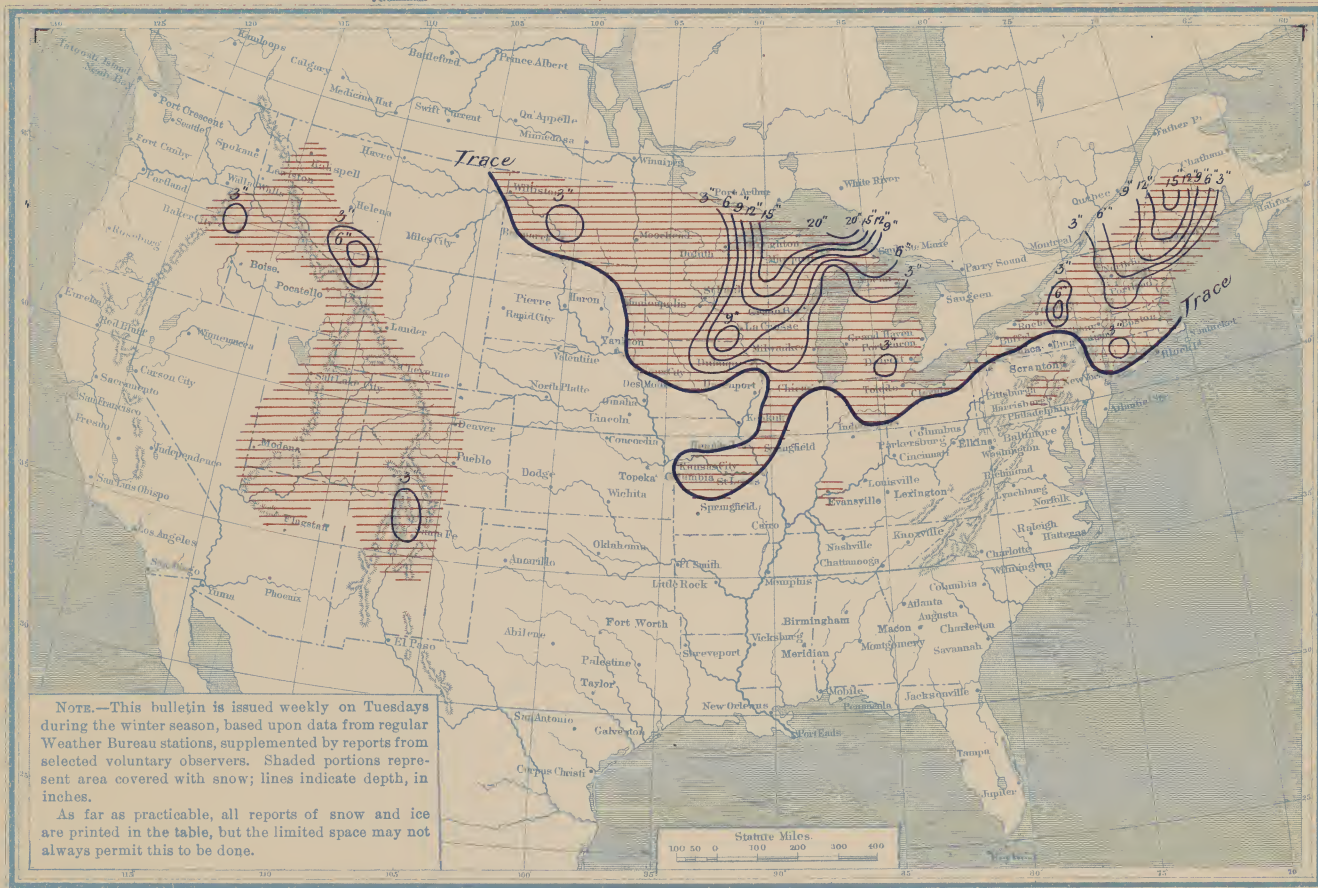
T. indicates trace.

Jan. 3, 1905

U. S. DEPARTMENT OF AGRICULTURE,
WEATHER BUREAU.

SNOW AND ICE BULLETIN.

PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE.
Willis L. Moore, Chief U. S. Weather Bureau.



WASHINGTON, D. C., January 3, 1905.

DEPTH OF SNOW AND THICKNESS OF ICE AT 8 P. M., JANUARY 2, 1905.

DEPTH OF SNOW.

In northern New England and over the greater part of the Lake region and upper Mississippi Valley, there was more snow at 8 p. m., January 2, 1905, than there was at the same hour on December 26, 1904, but considerably less in the Middle Atlantic States and in the upper Missouri Valley. There was also less snow in the northern Rocky Mountain region than was shown by the preceding bulletin, but stations in the southern Rocky Mountain region, at which there was no snow on December 26, 1904, reported considerable depths on January 2.

At the corresponding date of 1904 the area covered was much greater and, with the exception of portions of northern New England and the upper Mississippi Valley, the depths were also greater. At some stations in the southern Rocky Mountain region where there was none on January 2, 1904, considerable snow is now reported.

ICE IN RIVERS, HARBORS, ETC.

In the lower Lake region and the northern portion of the Middle Atlantic States there was generally less ice at 8 p. m., January 2, 1905, than at the same hour on December 26, 1904, while most stations on the upper Missouri River reported a decided increase, a slight increase being generally indicated in the rivers of New England.

The following special reports have been received by telegraph:

Gardiner, Me., January 2.—Unfavorable weather prevented much ice being housed last week. All operations were suspended to-day owing to very mild weather.

Albany, N. Y., January 3.—Snow in Mohawk Valley averages about two inches, and in Hudson Valley ranges from three inches at Glens Falls to trace below Albany. Ice in Mohawk river is seven inches thick; ice in Hudson ranges from twelve inches at Glens Falls to six inches at Castleton. Snow increased by about three inches during the night.

Harrisburg, Pa., January 2.—Ice broke on headwaters north and west branches Tuesday night (27th), and on river below Sunbury Thursday and Friday, break at Harrisburg occurring soon after midnight Thursday. Ice gorge reported near Jersey shore on west branch and small jams at other points. Banks of river strewn with cakes of ice forced out by flood attending break.

With the exception of northern New England, there is now decidedly less ice in the northern districts than there was at the corresponding date of 1904, the difference ranging from 2 to 6 inches in the upper Missouri River, from 8 to 14 inches in the upper Mississippi, and from 4 to 10 inches at stations in the Lake region.

JAMES BERRY, Chief of Climate and Crop Division.

Stations.		Stations.		Stations.	
Snow.	Ice in rivers, harbors, etc.	Snow.	Ice in rivers, harbors, etc.	Snow.	Ice in rivers, harbors, etc.
Arizona.	Inches	Massachusetts—Con.	Inches	New York—Cont'd.	Inches
Flagstaff	T.	North Adams	1	New York	T.
Colorado.		Michigan.		Ogdensburg	2
Denver	1	Alpena	3	Oswegatchie	T.
Durango	1	Big Rapids	T.	Oswego	2
Grand Junction	1	Detroit	2	Rochester	2
Connecticut.		Escanaba	2	Rome	8
Hartford	1	Grand Rapids	2	Syracuse	T.
New Haven	1	Hillsdale	3	North Dakota.	
West Cornwall	4	Houghton	17	Bismarck	4
West Simsbury	2	Humboldt	18	Devils Lake	1
Illinois.		Lansing	2	Williston	T.
Ashton	T.	Mackinaw	6	Ohio.	
Chicago	T.	Mancelona	4	Cleveland	1
La Salle	T.	Marquette	15	Sandusky	1
Mionok	T.	Port Huron	T.	Toledo	1
Monmouth	T.	South Sts. Marie	8	Oregon.	
Springfield	T.	South Haven	T.	Baker City	3
Winchester	T.	Wetmore	T.	Pennsylvania.	
Winnebago	T.	Minnesota.		Erie	2
Indiana.		Duluth	1	Harrisburg	T.
Evansville	T.	Maple Plain	1	Philadelphia	2
Indianapolis	T.	Minneapolis	T.	Selinsgrove	2
Marion	1	Moorhead	2	Williamsport	1
Rochester	T.	St. Paul	T.	Rhode Island.	
Syracuse	T.	Shakopee	T.	Block Island	T.
Iowa.		Winnebago	2	Kingston	1
Albia	T.	Missouri.		Narragansett	T.
Atlantic	T.	Brunswick	T.	Providence	T.
Charles City	12	Columbia	T.	South Dakota.	
Des Moines	2	Kansas City	T.	Huron	12.5
Dubuque	4	St. Louis	T.	Pierre	13.0
Estherville	1	Springfield	T.	Yankton	9.5
Forest City	1	Montana.		Utah.	
Greene	4	Kallispell	1	Modena	2
Iowa City	T.	Nebraska.		Salt Lake City	1
Sioux City	T.	Omaha	5.5	Vermont.	
Maine.		New Hampshire.		Brattleboro	4
Bangor	9	Bethlehem	8	Northfield	3
Eastport	1	Concord	2	St. Johnsbury	8
Gardiner	10	Durham	2	Wisconsin.	
Lewisville	10	Keene	3	Ashland	12
Millhooket	16	New Mexico.		Grand Rapids	8
Orono	12	Santa Fe	4	Green Bay	6
Portland	2	New York.		La Crosse	8
Vanceboro	9	Albany	T.	Madison	5
Maryland.		Beaver	5	Milwaukee	1
Baltimore	3.5	Buffalo	1	Mount Horeb	4
Massachusetts.		Cooperstown	T.	Portage	4
Adams	T.	De Ruyter	1	Prentice	20
Amherst	2	Herkimer	1	Racine	T.
Boston	T.	Ithaca	1	Sheboygan	1
Concord	1	Lowville	4	Wyoming.	
Mansfield	2	Malone	1	Yellowstone Park	7

T. indicates trace.

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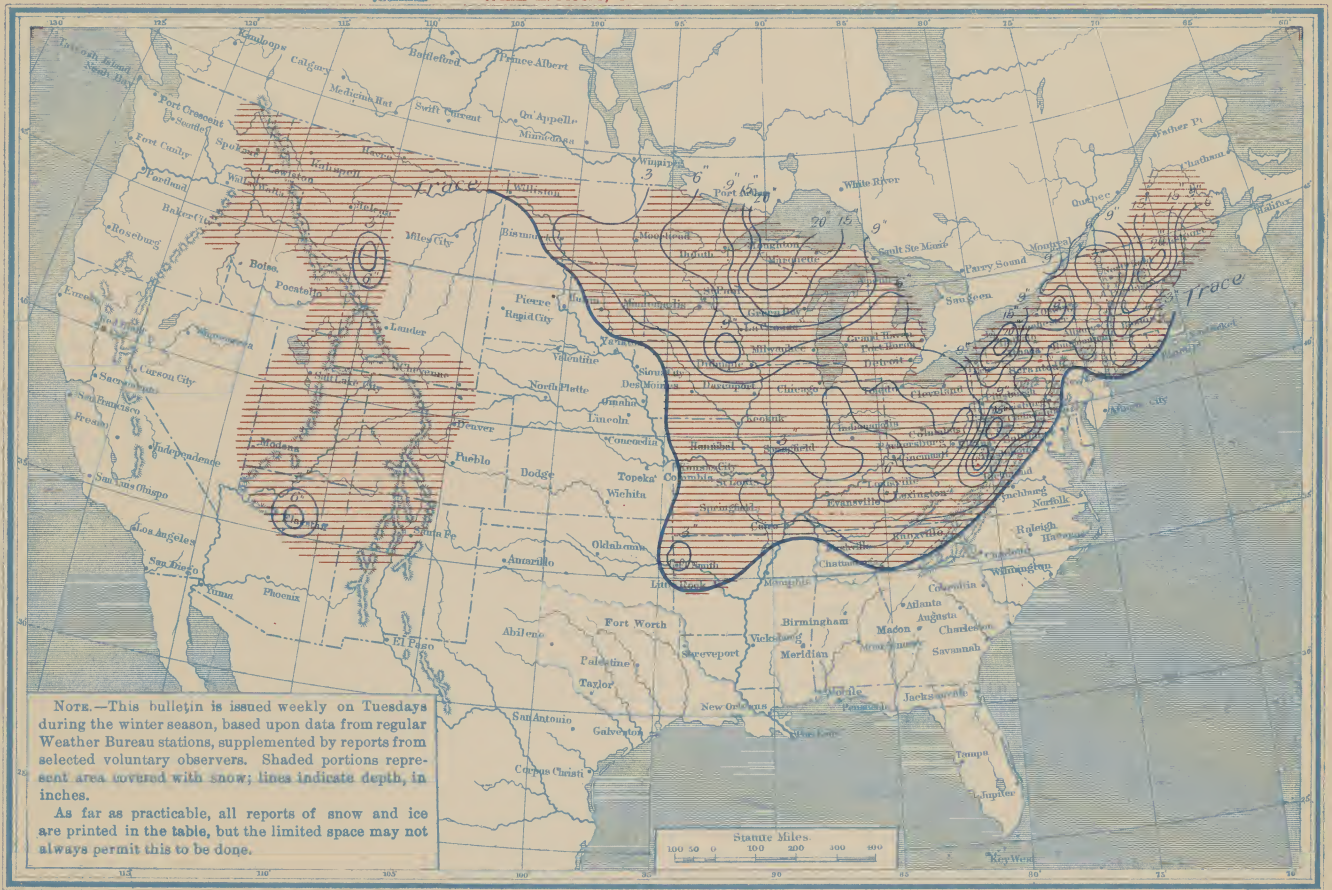
Jan. 10, 1905

U. S. DEPARTMENT OF AGRICULTURE,
WEATHER BUREAU.

SNOW AND ICE BULLETIN.

PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE.

Willis L. Moore, Chief U. S. Weather Bureau.



Note.—This bulletin is issued weekly on Tuesdays during the winter season, based upon data from regular Weather Bureau stations, supplemented by reports from selected voluntary observers. Shaded portions represent area covered with snow; lines indicate depth, in inches.
As far as practicable, all reports of snow and ice are printed in the table, but the limited space may not always permit this to be done.

WASHINGTON, D. C., January 10, 1905.

DEPTH OF SNOW AND THICKNESS OF ICE AT 8 P. M., JANUARY 9, 1905.

DEPTH OF SNOW.

The area covered by snow at 8 p. m., January 9, 1905, was much greater than at the same hour on the 2d instant, and reached the lowest latitude of the winter thus far, over the central portions of the country, the southern limit being from 200 to 300 miles farther south than was shown by the preceding bulletin. Increased depths are indicated in all districts with the exception of portions of northern New England and the central Rocky Mountain Slope, where there was less than was reported in the previous week. Portions of the upper Lake region, western New York, northern New England, and the mountains of West Virginia were covered to depths ranging from 9 to 18 inches or more, and nearly the whole of the winter wheat belt to depths generally ranging from 1 to 4 inches.

At the corresponding date, of 1904 there was much more snow in the Middle Atlantic States and New England and over the greater part of the Lake region, but the greater part of the central valleys now covered was practically free from snow.

ICE IN RIVERS, HARBORS, ETC.

Since the 2d instant there has been an increase in the thickness of ice at most of the stations reporting on that date. In some instances, however, there has been no change, and at a few stations in the Middle Atlantic States there has been a slight decrease. The increase in the upper Missouri River ranges from 1 to 5 inches and in the upper Mississippi from 2 to 9 inches, the latter river being frozen southward to Davenport, farther south than at any previous date of the winter. Ice now ranges from 10.5 inches to 19.5 inches in the upper Missouri; from 8 inches to 14 inches in the upper Mississippi; generally from 3 inches to 13 inches at stations on the Great Lakes, and from 10 inches to 21 inches in the rivers of New England.

The following special reports have been received by telegraph:

Gardiner, Me., January 9.—Harvesting operations commenced this morning; nothing was accomplished last week owing to heavy snow and rain. The condition of the ice fields is good and the harvest promises to be larger than for several years.

Albany, N. Y., January 10.—Snow in Mohawk Valley ranges from four to six inches, and in Hudson Valley from five inches at Glensfalls to trace at Cedar Hill and two inches at Athens. Ice in Mohawk River is about twelve inches thick, and ice in Hudson ranges from fourteen inches at Glensfalls to nine inches at Cedar Hill and ten inches at Athens.

Harrisburg, Pa., January 9.—Depth of snow over Susquehanna and Juniata valleys averages about four inches. Flood of Saturday and Sunday caused overflow of some lowlands in gorged districts, the greatest damage reported occurring in Cecil County, Maryland.

Cincinnati, Ohio, January 9.—River half full of light floating ice.

Kansas City, Mo., January 9.—Heavy floating ice.

Louisville, Ky., January 10.—Light floating ice.

Caño, Ill., January 9.—Mississippi River at this place is bank full of heavy floating ice.

Duluth, Minn., January 9.—Harbor ice ranges ten to eighteen inches; very little in lake.

There is now much less ice than there was at the corresponding date of 1904 in all northerly districts with the exception of northern New England and the central Missouri Valley where there is somewhat more.

JAMES BERRY, Chief of Climate and Crop Division.

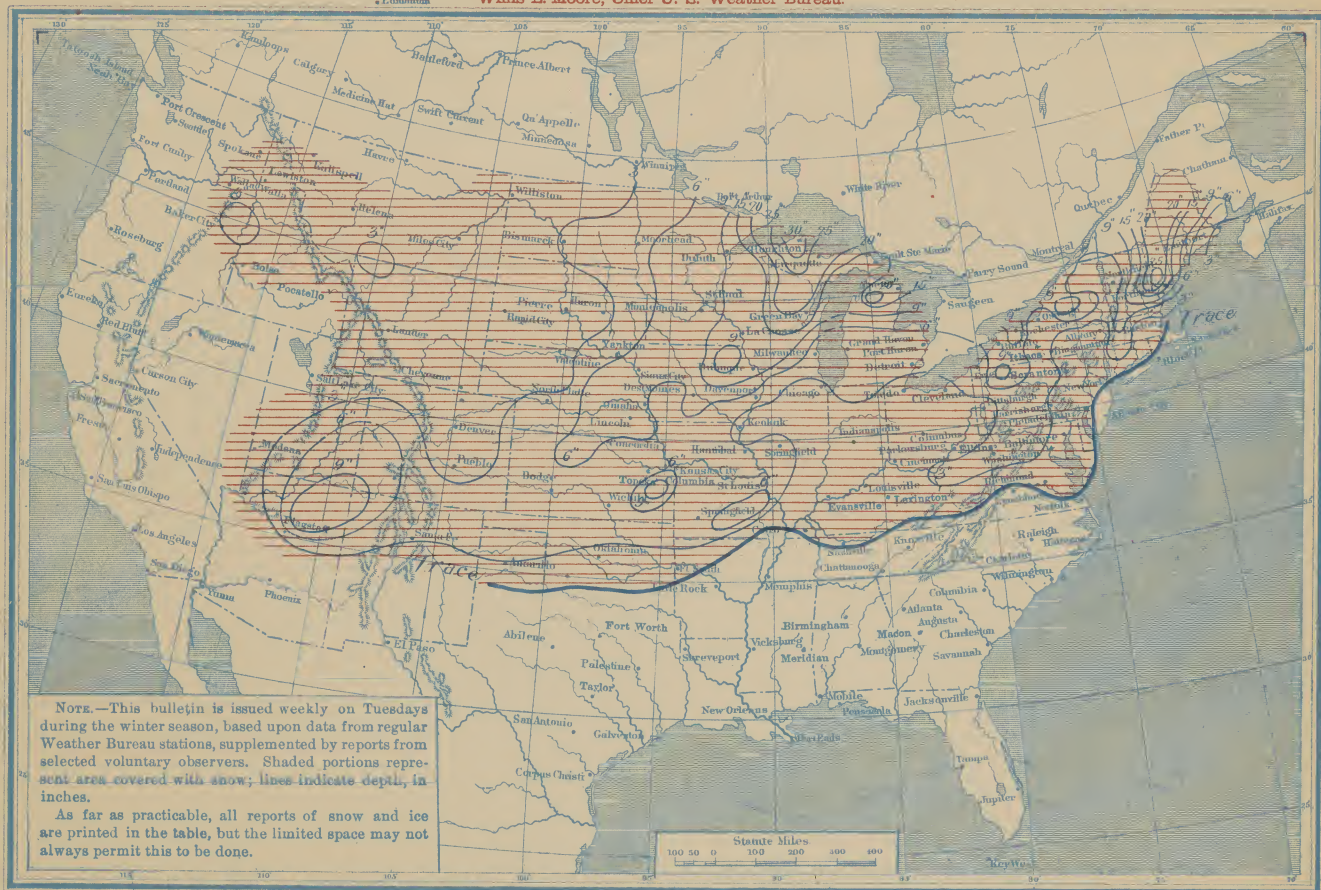
Stations.		Stations.		Stations.	
Snow.	Ice in rivers, harbors, etc.	Snow.	Ice in rivers, harbors, etc.	Snow.	Ice in rivers, harbors, etc.
Arizona.	Inches	Michigan.—Cont'd.	Inches	Ohio.	Inches
Flagstaff.	6	Carsonville.	1	Bangorville.	3
Arkansas.		Detroit.	4	Canal Dover.	3
Fort Smith.	3 0.0	Escanaba.	12	Cincinnati.	4 0.0
Little Rock.	2 0.0	Grand Rapids.	5	Cleveland.	1 3.0
Colorado.		Hillsdale.	5	Coalton.	2
Denver.	T.	Houghton.	22	Columbus.	1 3.5
Durango.	T.	Lansing.	3	Garrettsville.	5
Connecticut.		Marquette.	18	Philo.	3
Hartford.	T. 10.0	Port Huron.	4	Portsmouth.	1
New Haven.	3	Saginaw.	5	Sandusky.	2 7.0
West Simsbury.	5	Sault Ste. Marie.	8	Tiffin.	3
Delaware.		South Haven.	2	Toledo.	5 4.5
Millsboro.	T.	Minnesota.		Wauseon.	1
Illinois.		Beaver Bay.	20	Oregon.	
Ashton.	1	Bird Island.	3	Baker City.	2
Bloomington.	2	Duluth.	7	Pennsylvania.	13
Calro.	3 0.0	Maple Plain.	4	Aleppo.	13
Chicago.	2	Minneapolis.	4	Erie.	7.5
Hillsboro.	4	Moorhead.	5	Gordon.	4
La Salle.	1	New London.	4	Greenville.	9
Monmouth.	2	St. Paul.	4	Harrisburg.	2 0.0
Olney.	3	Shakopee.	3	Pittsburg.	8 0.0
St. John.	3	Missouri.		Seranton.	T.
Springfield.	1	Columbia.	1	Sells Grove.	3
Winchester.	2	Ironton.	4	State College.	4
Winnebago.	2	Kansas City.	T. 0.0	Rhode Island.	
Indiana.		Newhaven.	3	Kingston.	T.
Evansville.	3 0.0	St. Louis.	2	Narragansett.	T.
Indianapolis.	4	Sedalia.	1	Providence.	T. 0.0
Jeffersonville.	2	Springfield.	2	South Dakota.	
Lafayette.	4	Trenton.	1	Huron.	T. 14.5
La Porte.	3	Montana.		Pierre.	T. 14.5
Marion.	2	Havre.	T.	Rapid City.	T.
Rochester.	2	Helena.	T.	Yankton.	T. 11.0
Rockville.	1	Kalispell.	1	Tennessee.	
Syracuse.	3	Nebraska.		Chattanooga.	1 0.0
Iowa.		Omaha.	10.5	Knoxville.	2 0.0
Albia.	2	New Hampshire.		Nashville.	4
Carroll.	T.	Bethlehem.	7	Utah.	
Charles City.	13	Chatham.	15	Modena.	1
Davenport.	1 9.0	Concord.	9	Salt Lake City.	1
Des Moines.	2 9.0	Durham.	6	Vermont.	
Dubuque.	6 8.0	Keene.	8	Brattleboro.	10 15.0
Estherville.	T.	New Mexico.		Northfield.	1
Iowa City.	1	Santa Fe.	1	Virginia.	
Koosauk.	1 0.0	Addison.	6	Blacksburg.	3
St. Louis.	13.0	Albany.	1 7.0	Stephens.	3
Waterloo.	7	Auburn.	4	Woodstock.	1
Kentucky.		Beaver.	9	Wytheville.	3
Bowling Green.	4	Binghamton.	2 0.0	Washington.	
Cattlettsburg.	1	Buffalo.	11 6.0	Spokane.	1
Eubank.	4	Cooperstown.	5	West Virginia.	
Greensburg.	2	Cutchoque.	3	Elkins.	10 0.0
Lexington.	6	De Ruyter.	6	Fairmont.	11
Louisville.	3 0.0	Franklinville.	25	Grafton.	18
Mount Sterling.	4	Geneva.	5	Parkersburg.	2 2.0
St. John.	3	Ithaca.	3	Pickens.	25
Maine.		Jamestown.	15	Weston.	15
Bangor.	4 17.0	Lowville.	9	Wheeling.	2
Buckfield.	15	Malone.	2	Wisconsin.	
Eastport.	3 21.0	New York.	T.	Ashland.	14 10.0
Gardner.	11 15.0	Ogdensburg.	13	Barron.	15
Lewiston.	22 12.0	Swegatchie.	3	Grand Rapids.	14
Milwaukee.	18	Oswego.	7 12.5	Green Bay.	13 8.0
Orono.	10	Port Jervis.	3	La Crosse.	7 10.0
Portland.	11	Poughkeepsie.	2	Madison.	6
Maryland.		Rochester.	13 6.0	Milwaukee.	4 0.0
Baltimore.	4.5	Rome.	10	Portage.	8
Frederick.	T.	Syracuse.	3	Prentice.	23
Westernport.	9	Watertown.	3	Sheboygan.	10
Massachusetts.		Wedgwood.	6	Waupaca.	16
Adams.	10	North Carolina.		Wyoming.	
Boston.	T.	Asheville.	T.	Cheyenne.	1
Fitchburg.	7	North Dakota.		Yellowstone Park.	6
North Adams.	10	Bismarck.	4 19.5		
Michigan.		Williston.	T. 11.5		
Alpha.	8 9.0				

T. indicates trace.

SNOW AND ICE BULLETIN.

PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE.

Willis L. Moore, Chief U. S. Weather Bureau.



DEPTH OF SNOW AND THICKNESS OF ICE AT 8 P. M., JANUARY 16, 1905.

WASHINGTON, D. C., January 17, 1905.

DEPTH OF SNOW.

East of the lower Missouri Valley the area covered with snow at 8 p. m., January 16, 1905, was practically the same as on the 9th instant, the date of the preceding bulletin, but to the westward a large area that was free from snow on the 9th was covered to depths generally ranging from 1 to 9 inches on the 16th. In the upper Mississippi Valley, upper Lake region, New England, and portions of the Middle Atlantic States there was more snow on the 16th than on the 9th, but considerably less in the Ohio Valley and lower Lake region.

At the corresponding date of 1904 there was much less snow in the Missouri and upper Mississippi valleys and generally throughout the middle and northern Rocky Mountain districts, but there was more in the Lake region, Middle Atlantic States, and New England.

ICE IN RIVERS, HARBORS, ETC.

There has been a general increase in ice formation during the past week in all northern districts, the most decided increase being shown in the Lake region and in the upper Mississippi and Missouri valleys. The Missouri and Mississippi rivers are frozen farther south than at any previous time this winter, with ice ranging from 8 to 20 inches in the former and from 9 to 17 inches in the latter. At stations along the Great Lakes ice now generally ranges from 6 to 15 inches and in the rivers of New England from 12 to 23 inches.

The following special reports have been received by telegraph:

Gardiner, Me., January 16.—Weather favorable for the ice harvest. About one-fourth of the crop housed.

Albany, N. Y., January 17.—In Mohawk Valley snow ranges from 6 inches at Little Falls to 7 inches at Schenectady; in Hudson Valley from 6 inches at Glens Falls to 1 inch at Catskill and 2 inches at Athens. Ice in Mohawk River ranges from 4 inches at Little Falls to 10 inches at Schenectady; in Hudson from 16 inches at Glens Falls to 10 inches at Stuyvesant and 12 inches at Athens.

Harrisburg, Pa., January 16.—Depth of snow in Juniata and Susquehanna valleys averages about three inches. River has become icebound again at Wilkesbarre and Williamsport. No change reported in gorges. River at Harrisburg covered with floating ice.

Pittsburg, Pa., January 16.—Running ice in Allegheny River.

Cincinnati, Ohio, January 16.—River two-thirds full of heavy floating ice.

Evansville, Ind., January 17.—Heavy floating ice.

Cairo, Ill., January 16.—Mississippi River back of Cairo solidly gorged and frozen over. Thickness of ice ranges from three to nine inches.

Memphis, Tenn., January 17.—Light floating ice.

St. Louis, Mo., January 17.—Heavy floating ice reported gorged above Chester on 16th. Water backing from gorge on 17th.

Hannibal, Mo., January 16.—Channel open below bridge. Ice harvest commenced.

Kansas City, Mo., January 16.—River open in places.

Duluth, Minn., January 16.—Rather large detached fields in lake.

Throughout the Lake region, Ohio and upper Mississippi valleys, the extreme northern portion of the upper Missouri valley, and the greater part of the Middle Atlantic States there is now considerably less ice than there was at the corresponding date of 1904, but in the central and lower Mississippi valleys and in northern New England there is more.

JAMES BERRY, Chief of Climate and Crop Division.

Stations.	Snow.	Ice in rivers, harbors, etc.	Stations.	Snow.	Ice in rivers, harbors, etc.	Stations.	Snow.	Ice in rivers, harbors, etc.
Arizona.	Inches	Inches	Michigan—Cont'd.	Inches	Inches	New York—Cont'd.	Inches	Inches
Flagstaff	14		Hillsdale	4		Malone	4	
Flagstaff	14		Houghton	33	7.5	Ogdensburg	15	
Fort Smith	1	0.0	Humboldt	31		Oswegatchie	4	
Colorado.			Lansing	4		Oswego	4	14.5
Durango	24		Manuelona	23	0.0	Plattsburg	12	
Grand Junction	6		Marquette	33	11.0	Rochester	12	8.0
Connecticut.			Port Huron	5		Rome	5	
Hartford	T.	11.5	Saginaw	5		Saranac Lake	4	
West Cornwall	3		Sault Ste. Marie	10	15.0	Saratoga	6	
West Simsbury	4		St. Ignace	10		Watertown	6	
Illinois.			South Haven	5		North Dakota.		
Bloomington	2		Minnesota.			Bismarck	4	20.0
Chicago	2		Beaver Bay	20	0.0	Devils Lake	2	
Hillboro	2		Big Island	9		Williston	T.	18.0
La Salle	2		Duluth	9	15.0	Ohio.		
Monmouth	2		Farmington	8		Cleveland	T.	6.0
Springfield	3		Glencoe	6		Columbus	T.	6.0
Winnebago	4		Maple Plain	3		Garrettsville	3	
Indiana.			Minneapolis	7		Sandusky	2	9.0
Auburn	2		Moorhead	5	23.0	Toledo	2	8.0
Lafayette	2		New London	7		Wauson	2	
Laporte	2		St. Paul	7	17.0	Oklahoma.		
Marengo	2		Shakopee	7		Oklahoma	2	
Princeton	2		Two Harbors	19	0.0	Baker City	4	
Iowa.			Winnebago	17		Pennsylvania.		
Albia	5		Missouri.			Clarion	11	
Carroll	5		Brunswick	3		Emporium	6	
Charles City	17		Columbia	4		Erie	3	10.5
Davenport	3	17.5	Hannibal	4	9.5	Gordon	2	
Des Moines	8	13.0	Ironton	6		Marion	5	
Dubuque	9	13.0	Kansas City	3	8.0	Philadelphia	2	0.5
Estherville	4		Maryville	5		Pittsburg	2	3.0
Forest City	5		Newhaven	5		State College	3	
Fort Dodge	6		St. Louis	2	0.0	Williamsport	3	
Greene	10		Springfield	4		Rhode Island.		
Keokuk	2	14.0	Trenton	3		Providence	T.	0.5
Keosauqua	6		Willowsprings	6		South Dakota.		
Sioux City	6	13.0	Montana.			Huron	2	19.0
Kansas.			Kalispell	1		Pierre	1	17.0
Anthony	4		Nebraska.			Yankton	5	12.0
Concordia	4		Brokenbow	2		Tennessee.		
Cottonwood Falls	9		Columbus	8		Nashville	1	
Dodge	5		Falls City	6		Texas.		
Manhattan	4		Hebron	8		Amarillo	3	
Topeka	4		Imperial	4		Modena	2	
Toronto	6		Lincoln	4		Vermont.		
Wichita	4		Madison	7		Brattleboro	9	18.0
Winfield	3		Miner	3		Northfield	5	
Kentucky.			North Platte	5		Virginia.		
Caldwellsburg	3		Omaha	5	12.5	Richmond	T.	0.5
Eubank	2		St. Paul	6		Woodstock	3	
Lexington	1		Tekamah	8		Washington.		
Mount Sterling	2		New Hampshire.			Port Crescent	1	
Maine.			Bethlehem	9		Walla Walla	1	
Bangor	5	20.0	Chatham	22		West Virginia.		
Buckfield	24		Concord	10	17.5	Elkins	3	0.0
Eastport	2	23.0	Keene	10		Rowlesburg	8	
Gardiner	12	15.0	New Jersey.			Smithfield	4	
Lewiston	26	19.0	Cape May	T.	2.0	Wisconsin.		
Millinocket	24		New Mexico.			Ashland	20	14.0
Orono	12		Santa Fe	3		Burnett	18	
Portland	20		New York.			Grand Rapids	20	
Maryland.			Addison	6		Green Bay	17	10.0
Baltimore	T.	5.5	Albany	1	8.5	La Crosse	10	16.0
Fallston	3		Albany	1		Madison	9	
Massachusetts.			Bozeman	11		Milwaukee	5	4.0
Boston	T.		Binghamton	2	0.0	Mount Horeb	10	
Concord	6		Buffalo	8	8.5	Portage	12	
Fitchburg	7		De Ruyter	6		Racine	6	
North Adams	8		Franklinville	8		Washington	14	12.0
Michigan.			Geneva	4		Waupaca	23	
Alpena	16	11.0	Ithaca	2		Wyoming.		
Big Rapids	3		Jamestown	6		Cheyenne	1	
Detroit	3	9.0	Lake Placid	5		Yellowstone Park	6	
Escanaba	13	15.0	Le Roy	10				
Grand Rapids	5		Lowville	10				

T. Indicates trace.

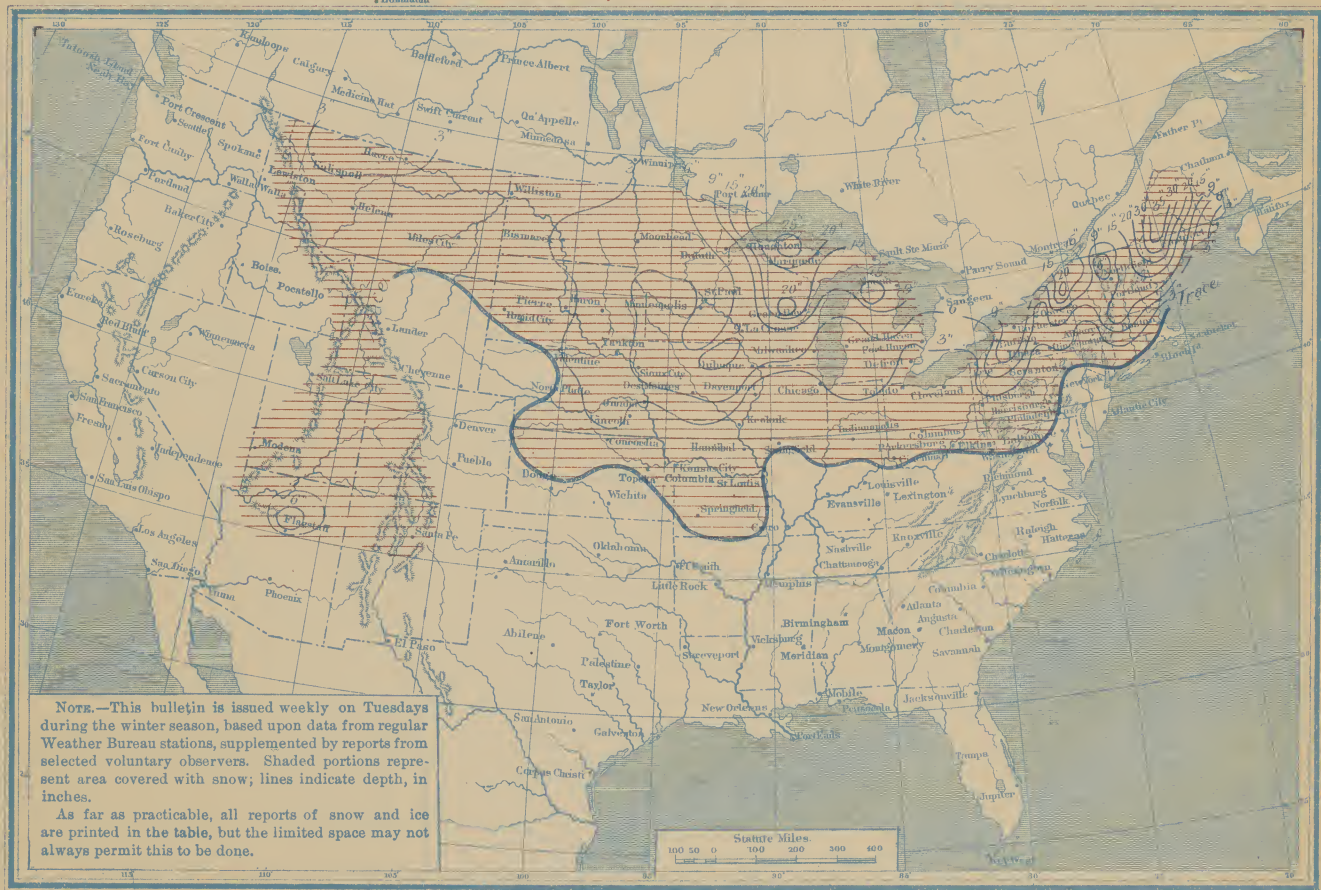
Jan. 24, 1905

U. S. DEPARTMENT OF AGRICULTURE,
WEATHER BUREAU.

SNOW AND ICE BULLETIN.

PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE.

Willis L. Moore, Chief U. S. Weather Bureau.



WASHINGTON, D. C., January 24, 1905.

DEPTH OF SNOW AND THICKNESS OF ICE AT 8 P. M., JANUARY 23, 1905.

At 8 p. m., January 23, 1905, the central Rocky Mountain slope, portions of which were covered to considerable depths on the 16th, was practically free from snow and diminished depths were reported throughout the lower Missouri Valley and over much of the upper Mississippi Valley and Lake region, but increased depths were reported from the greater part of New England and New York and from the upper Missouri Valley and western Montana. In northern Maine and in portions of northern New York depths now range from 1 foot to more than 3 feet in places.

At the corresponding date of 1904 there was considerably more snow in the Lake region and southern New England, but less in northern New England and in the upper Mississippi and Missouri valleys. There was also considerably more snow in the central and northern Rocky Mountain districts, but less in the southern Plateau region.

ICE IN RIVERS, HARBORS, ETC.

A further but generally slight increase in thickness of ice is indicated in all northern districts, with the exception of portions of the Ohio Valley, Middle Atlantic States, and southern New England, where there has been a slight decrease. In the Missouri River ice now ranges from 8 inches at Kansas City, Mo., to 23 inches at Bismarck, N. Dak.; in the upper Mississippi, from 11.5 inches at Davenport, Iowa, to 18.5 inches at St. Paul, Minn.; at stations along the Great Lakes, from 3 to 19 inches, and in the rivers of New England, from 12 to 22 inches.

The following special reports have been received by telegraph:

Gardiner, Me., January 23.—Unfavorable weather the past week for the ice and lumber operations. The depth of snow now in Kennebec Valley will no doubt curtail both.

Albany, N. Y., January 24.—In Mohawk Valley snow ranges from 8 inches at Little Falls to 4 inches at Mohawk and 6 inches at Schenectady; in Hudson Valley from 7 inches at Glens Falls to trace at Cedar Hill, and 1 inch at Athens and Castleton. Ice in Mohawk River is about 12 inches thick; in Hudson it ranges from 17 inches at Glens Falls to 11 inches at Cedar Hill and Castleton and 12 inches at Athens.

Pittsburg, Pa., January 23.—Light running ice in Allegheny.

Cincinnati, Ohio, January 23.—River practically clear of ice.

Evansville, Ind., January 24.—River again nearly full of heavy ice.

Cairo, Ill., January 24.—Ohio River nearly half full of moderately heavy ice.

Cairo, Ill., January 23.—Mississippi River continues gorged and frozen over back of Cairo.

St. Louis, Mo., January 23.—Gorge at Grand Tower still intact.

Hamilton, Mo., January 23.—Channel open below bridge.

Duluth, Minn., January 23.—Harbor ice ranges from 18 to 20 inches. Large fields extending 20 miles lakeward.

Kansas City, Mo., January 23.—River still open in places.

In New England and portions of the Missouri River there is more ice than there was at the corresponding date of 1904, but in the upper Mississippi river and throughout the Lake region there is decidedly less.

JAMES BERRY, Chief of Climate and Crop Division.

Stations.		Stations.		Stations.	
Snow.	Ice in rivers, harbors, etc.	Snow.	Ice in rivers, harbors, etc.	Snow.	Ice in rivers, harbors, etc.
Arizona.	Inches	Michigan—Cont'd.	Inches	New York—Cont'd.	Inches
Flagstaff	8	Port Huron	4	Poughkeepsie	2
Colorado.	Inches	Saginaw	6	Rochester	10
Durango	5	Sault Ste. Marie	10	Rome	6
Grand Junction	1	St. Ignace	10	Saranac Lake	16
Connecticut.	Inches	South Haven	4	Saratoga	8
Hartford	2	Westbranch	10	Shortsville	11
New Haven	1	Minnesota.	Inches	Syracuse	3
West Cornwall	5	Beaver Bay	20	Watertown	4
West Simsbury	5	Bird Island	7	Wedgwood	7
Illinois.	Inches	Duluth	7	North Dakota.	Inches
Ashton	1	Glencoe	6	Bismarck	5
Bloomington	2	Mapleplain	7	Devils Lake	2
Chicago	2	Minneapolis	4	Williston	1
La Salle	1	Moorhead	5	Ohio.	Inches
Monmouth	2	New London	6	Bangorville	1
Springfield	1	St. Paul	5	Canal Dover	T.
Winchester	T.	Two Harbors	19	Cincinnati	T.
Indiana.	Inches	Winnebago	4	Cleveland	T.
Lafayette	1	Missouri.	Inches	Columbus	1
Laporte	3	Columbia	1	Garrettsville	T.
Marion	1	Hannibal	1	Philo	T.
Rockville	1	Ironton	3	Sandusky	T.
Iowa.	Inches	Kansas City	T.	Toledo	T.
Albia	5	Macon	T.	Wauseon	1
Carroll	6	Newhaven	2	Oregon.	Inches
Charles City	15	St. Louis	T.	Baker City	T.
Davenport	1	Springfield	T.	Pennsylvania.	Inches
Des Moines	6	Trenton	T.	Aleppo	2
Dubuque	7	Willowsprings	3	California	T.
Forest City	5	Montana.	Inches	Clarion	8
Greene	12	Havre	3	Erie	1
Iowa City	7	Helena	1	Harrisburg	T.
Kaukauk	4	Kallispell	5	Pittsburg	1
Sioux City	6	Miles City	1	Scranton	1
Waterloo	10	Nebraska.	Inches	Selinsgrove	2
Kansas.	Inches	Barley	1	State College	2
Concordia	1	Brokenbow	T.	Towanda	2
Dodge	T.	Falls City	2	Williamsport	3
Horton	1	Hobron	3	Rhode Island.	Inches
McPherson	T.	Lincoln	1	Providence	T.
Manhattan	T.	Minden	1	South Dakota.	Inches
Ottawa	T.	Oakdale	3	Huron	3
Topeka	T.	Omaha	3	Pierro	2
Maine.	Inches	St. Paul	3	Rapid City	1
Bangor	10	Valentine	3	Yankton	4
Buckfield	23	New Hampshire.	Inches	Utah.	Inches
Eastport	2	Bethlehem	16	Modena	T.
Gardiner	18	Chatham	24	Salt Lake City	T.
Lewiston	30	Concord	11	Vermont.	Inches
Millinocket	38	Durham	10	Brattleboro	10
Orono	18	Keene	12	Northfield	6
Portland	16	New Jersey.	Inches	St. Johnsbury	14
Maryland.	Inches	Cape May	0.5	Dale Enterprise	T.
Baltimore	6.0	New Mexico.	Inches	West Virginia.	Inches
Massachusetts.	Inches	Santa Fe	1	Cairo	3
Adams	12	New York.	Inches	Elkins	1
Amherst	4	Albany	1	New Martinsville	1
Concord	2	Auburn	5	Parkersburg	1
Fitchburg	7	Beaver	28	Rowlesburg	5
North Adams	T.	Binghamton	2	Wheeling	T.
Michigan.	Inches	Buffalo	5	Wisconsin.	Inches
Alpena	11	Cooperstown	5	Ashland	19
Big Rapids	5	Franklinville	12	Burnett	20
Carsonville	2	Herkimer	2	Grand Rapids	22
Detroit	2	Ithaca	2	Green Bay	17
Escanaba	10	Jamestown	7	La Crosse	9
Grand Rapids	3	Lake Placid	18	Madison	8
Hillsdale	4	Le Roy	10	Milwaukee	5
Houghton	24	Lowville	18	Mount Horeb	9
Humboldt	28	Malone	6	Portage	11
Lansing	4	Ogdensburg	6	Racine	4
Mackinaw	14	Oswegatchie	15	Wyoming.	Inches
Mancelona	18	Oswego	6	Yellowstone Park	2
Marquette	21	Plattsburg	2		
		Port Jervis	2		

T. indicates trace.

U. S. DEPARTMENT OF AGRICULTURE,
WEATHER BUREAU.
SNOW AND ICE BULLETIN.

PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE.
Willis L. Moore, Chief U. S. Weather Bureau.



NOTE.—This bulletin is issued weekly on Tuesdays during the winter season, based upon data from regular Weather Bureau stations, supplemented by reports from selected voluntary observers. Shaded portions represent area covered with snow; lines indicate depth, in inches.
As far as practicable, all reports of snow and ice are printed in the table, but the limited space may not always permit this to be done.

WASHINGTON, D. C., January 31, 1905.

DEPTH OF SNOW AND THICKNESS OF ICE AT 8 P. M., JANUARY 30, 1905.

DEPTH OF SNOW.

Increased depths of snow were reported from nearly all northern districts at 8 p. m. January 30, 1905; but in most sections this increase was slight compared with the depths on the ground at the date of the preceding report, the greatest being shown in Kentucky and Tennessee and portions of the Lake region and the Middle Atlantic States and New England, where the increase ranged from 1 inch to 22 inches. Depths of 40 inches in northern New England, 33 inches in northern New York, and 34 inches in the northern peninsula of Michigan are indicated.

At the corresponding date of 1904 there were greater depths of snow reported from the Lake region and portions of the central valleys and Middle Atlantic States and New England. There was less snow, however, in parts of northern New England, southern New Jersey, Kentucky, and Tennessee, and generally throughout the upper Missouri Valley and eastern Rocky Mountain slope.

ICE IN RIVERS, HARBOURS, ETC.

A further and general increase in the thickness of ice is again shown in the reports from all northerly sections. Ice in the Missouri River ranges from 10 inches at Kansas City, Mo., to 24 inches at Williston, N. Dak.; in the upper Mississippi River from 16.5 inches at Davenport, Iowa, to 22 inches at Saint Paul, Minn., this river being frozen as far south as Saint Louis where eleven inches of ice is indicated. In the Lake region the ice ranges from 2 to 24 inches and in the rivers of New England from 12.5 to 30 inches.

The following special reports have been received by telegraph:

Gardiner, Me., January 30.—Extreme winter weather continues in the Kennebec Valley, making ice harvesting and lumbering expensive. Ice crop three-fourths housed.

Levieston, Me., January 30.—One company finished harvesting ice; fifteen thousand tons.

Albany, N. Y., January 31.—Snow in Mohawk Valley ranges from 10 inches at Little Falls to 15 inches at Tribes Hill, and 7 inches at Schenectady; in Hudson Valley from 6 inches at Glenfalls to 2 inches at Castleton, and 5 inches at Stuyvesant. Ice in Mohawk River ranges from 14 inches at Littlefalls to 13 inches at Schenectady; in Hudson at River from 19 inches at Glenfalls to 11 inches at Castleton, and 13 inches at Cedarhill and Stuyvesant.

Harrisburg, Pa., January 30.—Snow averages about six inches in depth over the Susquehanna and Juniata Valleys. Streams of system generally icebound. No material change in gorge situation at Jerseyshore and Port Deposit. River closed at Harrisburg about noon Thursday.

Pittsburg, Pa., January 30.—Light running ice in the Ohio and Allegheny rivers.

Parkersburg, W. Va., January 31.—Ohio River frozen over.

Cincinnati, Ohio, January 31.—River almost full of heavy ice.

Louisville, Ky., January 31.—River half full of heavy floating ice.

Evansville, Ind., January 31.—River continues one-third full of heavy floating ice.

Nashville, Tenn., January 31.—River full of floating ice.

Memphis, Tenn., January 31.—River two-thirds full of heavy ice.

Cairo, Ill., January 30.—Gorge in Mississippi River back of Cairo continues: Ohio river two-thirds full of heavy floating ice.

Hannibal, Mo., January 30.—Channel open below bridge.

Duluth, Minn., January 30.—Scattered fields of four-inch ice in lake; ice forming in lake at Two Harbors.

At New England stations and those in portions of the Middle Atlantic States and upper Ohio Valley and generally along the Missouri River, more ice is reported than at the corresponding date of 1904, but in the upper Mississippi River and throughout the Lake region much less is indicated.

FRANK HILLAM, Acting Chief Climate and Crop Division.

Stations.		Stations.		Stations.	
Snow.	Ice in rivers, harbors, etc.	Snow.	Ice in rivers, harbors, etc.	Snow.	Ice in rivers, harbors, etc.
Arizona.		Michigan—Cont'd.		North Carolina.	
Flagstaff	4	Manacelona	22	Asheville	T. 3.0
Connecticut.		Manistee	10	North Dakota.	
Hartford	14 12.5	Marquette	26 2.0	Bismarck	6 24.0
New Haven	8	Port Huron	6 14.0	Williston	1 24.0
West Simsbury	21	Saginaw	13	Ohio.	
Delaware.		Sault Ste. Marie	11 18.0	Canal Dover	3
Millsboro	13	St. Ignace	10	Cleveland	3 12.0
Dist. of Columbia.		South Haven	7	Columbus	1 8.0
Washington	4	Westbranch	17	Garrettsville	14
Illinois.		Minnesota.		Philo	T. 12.0
Chicago	2	Beaver Bay	20 0.0	Sandusky	1 10.0
Indiana.		Duluth	7 24.0	Toledo	5
Evansville	2 0.0	Farmington	8	Wauseon	5
Laporte	6	Glencoe	7	Pennsylvania.	
Marion	2	Minneapolis	4	Aleppo	5
Syracuse	4	Moorhead	5 30.0	California	3
Iowa.		New London	6	Clarion	10
Albia	6	St. Paul	3 22.0	Easton	14
Atlantic	8	Shakopee	5	Ephrata	14
Carroll	8	Two Harbors	19 4.5	Erle	13.5
Charles City	13	Missouri.		Greenville	4
Davenport	1 16.5	Hannibal	1 14.0	Harrisburg	5 5.0
Des Moines	8 17.0	Ironton	2	Marion	10
Dubuque	7 18.0	Kansas City	T. 10.0	Philadelphia	6 4.5
Forest City	15	Newhaven	T. 11.0	Pittsburg	3 0.0
Greene	6	St. Louis	2	Seranton	8
Iowa City	6	Willowsprings	2	Sellsgrove	8
Keokuk	1 17.0	Montana.		State College	2
Oseola	3	Havre	8	Towanda	6
Sioux City	7 13.5	Helena	2	Rhode Island.	
Kansas.		Miles City	3	Kingston	5
Topeka	2	Nebraska.		Providence	4 3.5
Kentucky.		Brokenbow	4	South Dakota.	
Bowling Green	7	Columbus	7	Huron	4 21.0
Callettsburg	4	Falls City	3	Pierre	3 21.0
Eubank	4	Hebron	4	Rapid City	3
Greensburg	4	Imperial	3	Yankton	7 16.0
Hopkinsville	8	Lincoln	3	Tennessee.	
Leitchfield	5	Minden	2	Knoxville	4 0.0
Lexington	5	North Platte	3	Nashville	8
Louisville	2 0.0	Omaha	8 14.0	Vermont.	
St. John	3	St. Paul	6	Northfield	6
Maine.		Valentine	5	St. Johnsbury	13
Buckfield	27	New Hampshire.		Virginia.	
Eastport	4 30.0	Bethlehem	17	Cape Henry	1
Gardiner	18 22.0	Chatham	24	Dale Enterprise	4
Lewiston	32 21.0	Concord	12 20.0	Lynchburg	4 3.5
Millinocket	40	Durham	13	Norfolk	1 0.0
Orono	18	Keene	14	Richmond	3 1.5
Portland	18	New Jersey.		Stephens	3
Maryland.		Atlantic City	12	Woodstock	2
Baltimore	8 8.0	Cape May	12 4.5	Wytheville	3
Massachusetts.		New York.		West Virginia.	
Easton	13	Albany	3 11.0	Cairo	2
Fallston	5	Beaver	33	Elkins	2 7.0
Frederick	9	Binghamton	6 0.0	Fairmont	4
Mount St. Marys	5	Buffalo	4 12.0	Martinsburg	3
Pocomoke	3	Cooperstown	6	New Martinsville	2
Massachusetts.		Do Ruyter	11	Parkersburg	2 4.0
Adams	12	Franklinville	12	Wheeling	2
Amherst	8	Ithaca	4	Wisconsin.	
Boston	9	Jamestown	12	Ashland	19 17.0
Concord	12	Lowville	18	Burnett	19
Pitchburg	19	Malone	6	Grand Rapids	22
Manchester	9	New York	6	Green Bay	16 14.5
Nantucket	17 0.0	Ogdonsburg	18	La Crosse	8 20.0
North Adams	11	Oswegatchie	20	Madison	8
Michigan.		Oswego	9 15.0	Millwaukee	4 4.0
Alpena	13 13.0	Poughkeepsie	24	Mount Horeb	9
Big Rapids	7	Rochester	12 11.0	Portage	11
Carsonville	5	Rome	6	Prentice	21
Detroit	4 13.0	Saranac Lake	18	Sheboygan	12
Escanaba	11 16.5	Saratoga	10	Washburn	14 16.0
Grand Rapids	5	Setauket	4	Wyoming.	
Hillsdale	4	Syracuse	3	Cheyenne	3
Houghton	25 14.0	Watertown	6	Yellowstone Park	3
Humboldt	3	Wedgwood	15		
Mackinaw	12				

T. indicates trace.